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Subcommittee on Trade of the Committee on Ways and Means

The potential effects of climate change legislation on the competitiveness of domestic energy-intensive industries

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Thank you for the opportunity to address the Subcommittee on the importance of providing a fair and effective system to address the potential effects of a carbon control regime on U.S. energy intensive industries and their international competitiveness.

My name is David Hamilton and I am the Director of Global Warming and Energy Programs for the Sierra Club. The Sierra Club is the nation's oldest, largest, and most influential environmental organization with 1.3 million members and supporters. We have chapters in 50 states and tens of thousands of volunteers across the country that put their personal time into protecting and improving the environment of their communities, states and the nation as a whole.

We are at a unique and very difficult point in history. During a time of economic emergency, we must address our emissions of pollution that is rapidly warming the planet and disabling many of the biological systems that have enabled life on Earth. This challenge also represents a unique opportunity to foster sustainable growth as we transition into a green energy economy, creating millions of jobs in the process.

Stemming Global Warming is Sierra Club's Top Priority

After focusing most of its efforts for more than a century primarily on protecting wild and special places, the Sierra Club chose global warming in 2005 as its top priority issue. That decision is continually reinforced by somber news from the scientific community. Nearly every day, more research emerges on the progression of warming and other aspects of climate disruption that the Intergovernmental Panel on Climate Change (IPCC) has identified as very likely resulting from the build-up of carbon dioxide and other gases emitted into the atmosphere through human activity.

We are in a race against time to reduce these emissions and slow their effects on the planet. As NASA scientist James Hansen and others have articulated, the continued warming of the planet will bring us to tipping points such as the thawing of Arctic tundra that lead to more and uncontrollable emissions of carbon dioxide – thus leading to more warming. If we lose this race to bring carbon-based warming under control, its effects will be out of our hands and all life on Earth will be faced with a severely altered home that will challenge nearly every aspect of society.

A Green Economy: Combating Global Warming and Creating Jobs

The Sierra Club has regarded the economic health of American wage-earners as a pre-condition for the nation's environmental health for many years. We have worked shoulder to shoulder with our partners the United Steelworkers and other unions to fight for real protection for both workers and the environment in international trade agreements going back to the development of North American Free Trade Agreement (NAFTA). We formed the Blue-Green Alliance with the Steelworkers that now includes the Communications Workers of America, the Service Employees International Union, and the Laborers International Union of North America, as well as Natural Resources Defense Council. In a steady and inexorable process, blue and green together increasingly recognize that quality of life for Americans is determined by both economic and environmental security.

I want to thank you Mr. Chairman, for your leadership in creating a new vision for our trade agreements, as demonstrated for example in the May 10th agreement which was a significant improvement in protecting workers and the environment. Just as we have insisted on a level playing field in our trade agreements, where workers' rights and the environment are protected, we must now ensure that there is no room for companies to relocate to countries with weaker climate legislation than ours. As outlined below, we believe we can accomplish this in a manner that is consistent with our current obligations in the World Trade Organization.

Emissions Leakage is a Critical Issue

I address you today to discuss the critical issue of how to control carbon dioxide emissions in the United States in a way that does not result in economic effects that spur an exodus of American energy-intensive industries.

The Sierra Club supports implementing a cap and auction mechanism that reduces carbon dioxide emissions at least 80 percent by 2050 to meet current scientific expectation of the U.S. share of reductions required to avoid the worst predicted effects of global warming. That mechanism can logically be expected to raise costs for energy intensive manufacturing, although we are working to see a cap designed to minimize increases in energy costs. Leakage occurs if those costs cause that manufacturing base to simply move to nations that do not have similar controls on carbon. Currently we believe there is cause for concern that this will be a problem in the energy intensive manufacturing sector. Given the highly global nature of these industries, it is reasonable to guard against such an outcome in both the domestic and international attempts to address climate change. We want to protect against off-shoring both because we want to maintain our domestic manufacturing base and because we want to protect the environment.

We have already seen a steady growth in emissions related to the production of exports. In 2005, 33 percent of China's domestic CO2 emissions were in the production of exports, while in 1987 this

number was only 12 percent. Recent research has also shown that Chinese exports are responsible 6 percent of global greenhouse gas emissions in 2005.[1]

Illegal logging

An example of how unregulated trade has had severe negative impacts on jobs, communities and the environment can be found when examining the pulp and paper industry, and the connections to trade in illegally harvested timber. Deforestation accounts for 1/5 of global greenhouse gas emissions[2], and protecting the world's forest resources is a cornerstone in preventing the most catastrophic impacts of climate change.

Among the causes for deforestation is the fact that there is a large unregulated market place for wood and timber products with few meaningful incentives for stopping illegal logging and the associated trade in these illegally harvested products. In addition to contributing dramatically to global warming, there are also significant effects on workers and the economy. Over the past few years, thousands of jobs have been lost in the U.S. paper industry as paper mills and converting facilities have been shut down. The paper industry conservatively estimates a loss of $1 billion a year as a result of the import of illegally harvested timber and wood products[3]. ILO studies have found that forest workers in countries such as Peru are frequently working under forced labor conditions[4].

The Sierra Club has worked with the United Steelworkers to address the issue of trade in illegally harvested timber and wood products, including through a 2006 petition to the Department of Commerce asking them to investigate whether the sustained non-enforcement of Indonesia's forestry laws constitutes a subsidy. Since that time, Sierra Club and USW have worked together to explore ways to strengthen U.S. trade laws so they can better address illegal logging.

To combat trade in illegally harvested timber as well any other unfair trading practices that occur, we must aggressively pursue policies that ensure a level playing field between domestic and foreign producers. In addition to utilizing our existing trade rules, we also believe that domestic climate legislation must include measures that eliminate any competitive disadvantage U.S. companies might be faced with as a result of the legislation.

Downstream Products

Any mechanism to minimize penalty to domestic manufacturers for compliance with a carbon cap and auction program must address the problem of goods that arrive in the U.S. containing

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[1] Weber, C.L., etal., *The Contribution of Chinese Exports to Climate Change,* 2008

[2] Nicholas Stern, The London School of Economics and Political Science, *Key Elements of a Global Deal on Climate Change*

[3] America's Free Trade for Illegal Timber, June 2006, Environmental Investigation Agency, *http://www.eia-international.org/files/reports118-1.pdf*

[4] Alvaro Bedoya Silva-Santisteban and Eduardo Bedoya Garland, International Labour Organization, *Forced Labor Wood Extraction in the Peruvian Amazon*, 2005

embedded emissions from non-comparable countries. For example, steel made in China that is converted into automobiles in Korea and that enter the U.S. by ship must be accounted for in a correction mechanism. Strong sectoral agreements within a larger global deal are the best way to address this problem.

The Best Protection for American Workers is a Strong Global Climate Deal

A strong global climate deal negotiated through the United Nations Framework Convention on Climate Change (UNFCCC) process is the best solution to competitiveness. A strong global deal that requires action to reduce emissions by all the largest emitters in the energy intensive manufacturing sector should be the goal of U.S. domestic policy, as well as the goal of our international negotiators. To reach this goal we need to bring a balanced proposal to the Copenhagen UNFCCC meeting in December of 2009. This package should include a strong domestic emissions reduction target, and we believe that the science justifies an absolute domestic emissions reduction from of at least 8-14 percent below 1990 levels by 2020.

However, a balanced international proposal will require more than just a domestic cap on greenhouse gas emissions. A full package should include financing for clean energy technology deployment, protections for forests in developing countries, and adaptation to unavoidable climate impacts, including a robust U.S. program of international global warming assistance for developing nations. These additional elements are essential components of the Bali Action Plan, negotiated last year by the Bush Administration through the UN process. In exchange for these elements, developing nations – including China -- have agreed to take measurable, reportable, and verifiable actions to reduce global warming.

There are Several Options Available to Domestic Policy Makers

The only real solution to the problem of emissions leakage is a global agreement by all major emitting countries to reduce emissions from the manufacturing to a negotiated level. The global deal negotiated in Copenhagen may include all of the building blocks necessary to forge a comprehensive solution to the energy intensive manufacturing sector. In order for a global climate deal to succeed, the U.S. must resume a leadership role in tackling climate change and demonstrate a significant commitment to actually reducing our own emissions. We can accomplish this by passing comprehensive climate legislation which puts a cap on our emissions, incentivizes investments in the green energy economy, and ensures that American companies are not put at a competitive disadvantage vis-à-vis countries that do not take similar action.

There are several options available to policy makers seeking to address the competitiveness problem. The goal of the competitiveness provisions in U.S. climate legislation should be to (1) prevent a decline in output or efficiency by U.S. producers in the face of higher costs, (2) guard against migration of U.S. manufacturing to other parts of the world, 3) ensure that no company

reaps a windfall profit, while 4) not losing track of the big picture need to create incentives for other countries to reduce emissions.

It is possible to protect domestic manufacturers with a relatively small percentage of the value of the credits in the system. The main industries that comprise the globally competitive energy intensive sector (iron and steel, aluminum and copper, nonmetal mineral products (cement and glass), paper and pulp, and basic chemicals) account for more than half of all carbon dioxide (CO2) emissions from the manufacturing sector, though their direct emissions account for less than 6 percent of the U.S. total (WRI 2007). Efforts to solve this problem should be focused on these industries, however Congress should delegate to an agency some responsibility to ensure that any company compensated is in fact subject to global competition.

Allocation of Free Credits

Past climate bills have addressed increased costs to manufacturers by allocating free carbon credits to the globally competitive energy intensive manufacturers based on historical emissions. The concern with this approach is that it does not provide a direct incentive against off-shoring, and instead may increase profits that could be used to offshore later.

Any allowance-based allocation should provide a direct incentive to increase domestic employment and drive investments in the energy efficiency of the company. It should also be designed to avoid windfall profits, since it is possible that those profits could be used to finance off-shoring later. The best way to do this is to tie the rebates to the production-based output of the company and not directly to the pollution.

Output-Based Rebates

Another option being discussed is the use of output-based rebates to compensate energy-intensive manufactures for goods subject to international trade. This option has been suggested by Reps. Jay Inslee and Mike Doyle in H.R. 7146 from the 110th Congress. The Inslee-Doyle framework intends to encourage energy efficiency on the part of manufacturers by setting aside 15 percent of total allowances to compensate them not just according to their cost of compliance with a carbon cap, but also by their emissions intensity and electric efficiency. The successful application of output-based rebates would significantly reduce the possibility that companies can use carbon regulation as an excuse to offshore manufacturing facilities and American jobs.

An output-based rebate could be further improved by allocating only to the average international production per unit of pollution. With this system companies would not be compensated for emissions above the international industry average, giving them a further incentive to improve efficiency. If this approach proves too complicated it may be possible to benchmark to an international standard and then require efficiency improvements to qualify for a full allocation of

allowances. In either case, allowance levels should decline over time, transitioning to full auctioning.

An important question is whether it would go too far. While the output-based rebate approach has the advantage of encouraging better carbon performance, it is complex and shares with the conveyance of free allowances the risk of providing windfall profits to manufacturers who have the ability to raise prices in response to the enactment of a carbon control program. We also need to determine if the act of rewarding efficient producers would encourage inefficient producers unable to compete to leave the country rather than upgrade domestic facilities.

Border Taxes and Adjustments

A border tax or adjustment will be needed if industries in other countries fail to take comparable action to address climate change. A correcting mechanism may also be needed to protect against movement of manufacturing to countries that do not have comparable requirements on their domestic manufacturers even if a fair deal is reached with the major emitting countries in Copenhagen. Border adjustment measures only apply to imports to the U.S. and do not fully address competition in the global market where U.S. producers may face greater competition from foreign producers. The only complete solution to this problem is a global deal that addresses the manufacture of globally competitive goods.

We believe that a border tax or adjustment is best set up as a backstop against the failure of a global deal or to address emissions from countries that have not taken similar action by the time we phase out rebates or free credits. While a border mechanism would be part of the legislation from day one, it would phase in as other mechanisms phase out. Negotiating international sectoral agreements is also consistent with WTO rules, which require good faith negotiations before any border tax can be imposed.

Border corrections should not be applied to the least developed countries or to countries whose industries are determined to have taken comparable action (see below).

Border Taxes

A border tax would amount to replacing a cap and trade system with a carbon tax for manufactured goods from internationally competitive energy intensive industries. A national tax would be assessed on the emissions associated with the energy use of certain categories of goods and adjusted over time to achieve reductions comparable to that sought by a carbon cap. Even if the cap is lifted for internationally competitive energy intensive industries the emissions from this sector should be reflected in the reductions required by companies under the cap. The cap should be adjusted to reflect progress toward emissions reductions for taxed industries. The tax would be assessed equally on all emissions-intensive goods consumed domestically, including imports, based

on their associated emissions. For imported goods, associated emissions could be calculated based on either firm-specific data or national averages.

There are already examples of how such border taxes have worked to protect the environment, while also being allowable under our WTO obligations. In 1989, as part of our obligations under the Montreal Protocol which was designed to protect the ozone layer by phasing out the production of ozone depleting chemicals (ODCs), Congress adopted production and consumption caps on ODCs, and enacted an excise tax on ODCs at the same time. The tax was imposed on the sale or use by a manufacturer, producer, or importer of any ODC, as well as on any product imported into the U.S. in which an ODC was used as a material in its manufacture or production.

The ODC excise tax was assessed on the same basis for domestic goods sold in the U.S. and for imported goods sold in the U.S. via a border adjustment tax on imports. The taxes were rebated on exports. This consumption-based excise tax drastically curtailed the use of ODCs. In 1990, the year the ODC excise tax was imposed, total CFC consumption dropped to 440 million pounds down from 700 million pounds in 1989[5]. It spurred industry to develop and use alternative chemicals and technologies, effectively protected the ozone layer, and was also compliant with GATT and WTO rules which allow indirect taxes to be adjusted at the border.

Border Adjustment

A border adjustment would use the apparatus of the cap to create the same kind of correction mechanism. Rather than pay a defined tax, it would require companies without comparable carbon restrictions to buy allowances at the border that reflected either firm-specific data on carbon emissions or national averages from the home country. Again, this is a potentially complex route and it does not have a WTO track record to give confidence of compatibility. But it should be possible to design such a system in conformity with WTO principles.

In addition, by virtue of the fact that most of our trade in energy-intensive goods is currently conducted with carbon-comparable nations, a border adjustment might create an increase in the proportion of such trade that is done with Canada and the European Union.

Comparable Action and Sectoral Agreements

We believe the issue of what constitutes comparable action is best addressed on a sectoral basis for developing countries and an economy wide basis for developed countries for the next commitment period of the international climate deal (2013 to 2017/ 2020). This approach is fair in that it allows developing countries to address the parts of their economy that they are most able to address, while still requiring more from the developed world for now.

[5] Elizabeth Cook, ed., Ozone Protection in the United States: Elements of Success, World Resources Institute (Nov. 1996)

The short term goal of any competitiveness approach should be to promote international sectoral agreements. Under a sectoral agreement GHG standards would be negotiated within energy-intensive globally-traded sectors. For example, major steel-producing countries could agree on standards limiting GHGs per ton of steel, which could be differentiated initially according to national circumstances and converge over time. These agreements could form the basis for a cap on emissions from the sector in the near term and ultimately would inform economy-wide caps for developing countries. If international sectoral agreements initially require less of developing countries than domestic manufacturers, compensation for energy-intensive industries could be maintained at some level and phased out as the requirements for other countries rise to those borne by the United States.

Conclusions

A combination of rebates or allocations and border taxes or adjustments could effectively level the carbon playing field, but they will not create incentives for developing countries to reduce their domestic emissions or to cooperate in the negotiations. In order to successfully address concerns about the competitiveness of U.S. industry we must also negotiate a fair international climate treaty this year in Copenhagen. Both of these goals are made more achievable if we deliver a balanced and comprehensive climate bill.

Thank you for this opportunity to address the Subcommittee. We stand ready to address any questions you might have.